

(12) UK Patent Application (19) GB (11) 2 200 642 A (13)

(43) Date of printing by UK Office 10 Aug 1988

(21) Application No 8806391

(22) Date of filing 17 Jul 1987

(30) Priority data
(31) 6983/86 (32) 17 Jul 1986 (33) AU
1046/87 24 Mar 1987

(86) International application data
PCT/AU87/00226 En 17 Jul 1987

(87) International publication data
WO88/00597 En 28 Jan 1988

(71) Applicant
Saramane Pty Ltd

(Incorporated in Australia-Victoria)

c/o The Walter and Eliza Hall Institute of Medical
Research, Royal Parade, Parkville, Victoria,
Australia

(72) Inventors
Ursula Anna Kate Kara
Deborah Joan Stenzel
Gillian Robin Bushell
Hendrik Mario Geysen
Allan James Saul

(51) INT CL⁴(as given by ISA)
C07K 7/06 A61K 39/015 39/395 C07K 15/12 C12N
5/00 15/00

(52) Domestic classification (Edition J):
C3H 804 819 F2AA F5A
U1S 2419 C3H

(56) Documents cited by ISA
AU A 66877/86 AU A 39959/85.
Proceedings of the National Academy of Sciences
(USA), Volume 82, August 1985, pages 5121 to 5125
Journal of Immunological Methods, Volume 86, 1986
pages 257 to 264
Chemical Abstracts, Volume 102, No 3, 1985 January
page 378 Abstract No. 20993

(58) Field of search by ISA
IPC WPI and WPIL Keyword: Plasmodium
falciparum
US USPA, USP77 USP70
Chemical Abstracts Keyword: Plasmodium
falciparum
AU: C07K 15/12, 13/00
C07G 7/00
A61K 39/015

(74) Agent and/or Address for Service
Frank B. Dehn & Co
Imperial House, 15-19 Kingsway, London, WC2B 6UZ

(54) Small molecular weight antigen of Plasmodium falciparum

(57) A small molecular weight antigen of the asexual blood stages of *Plasmodium falciparum* which is characterized by:
(i) having an apparent molecular weight in the range of approximately 15 kD to 19 kD; (ii) not showing significant glycosylation by galactose or glucosamine labelling, but being acylated by myristic acid; (iii) being associated with the parasitophorous vacuole membrane and with inclusions and vesicles residing within the cytoplasm of the erythrocyte host cell; and (iv) being recognised by monoclonal antibodies against the asexual blood stages of *P. falciparum* which inhibit parasite growth *in vitro*; or an antigenic fragment thereof. A monoclonal antibody specific for this antigen, and a hybrid cell line which produces this antibody is also disclosed.

GB 2 200 642 A

(12) UK Patent Application (19) GB (11) 2 200 642 (13) A

(43) Date of printing by UK Office 10 Aug 1988

(21) Application No 8806391

(22) Date of filing 17 Jul 1987

(30) Priority data
(31) 6983/86 (32) 17 Jul 1986 (33) AU
1046/87 24 Mar 1987

(86) International application data.
PCT/AU87/00226 En 17 Jul 1987

(87) International publication data
WO88/00597 En 28 Jan 1988

(71) Applicant
Saramane Pty Ltd

(Incorporated in Australia-Victoria)

c/o The Walter and Eliza Hall Institute of Medical
Research, Royal Parade, Parkville, Victoria,
Australia

(72) Inventors
Ursula Anna Kate Kara
Deborah Joan Stenzel
Gillian Robin Bushell
Hendrik Mario Geysen
Allan James Saul

(51) INT CL⁴(as given by ISA)
C07K 7/06 A61K 39/015 39/395 C07K 15/12 C12N
5/00 15/00

(52) Domestic classification (Edition J):
C3H 804 819 F2AA F5A
U1S 2419 C3H

(56) Documents cited by ISA
AU A 66877/86 AU A 39959/85.
Proceedings of the National Academy of Sciences
(USA), Volume 82, August 1985, pages 5121 to 5125
Journal of Immunological Methods, Volume 86, 1986
pages 257 to 264
Chemical Abstracts, Volume 102, No 3, 1985 January
page 378 Abstract No. 20993

(58) Field of search by ISA
IPC WPI and WPIL Keyword: Plasmodium
falciparum
US USPA, USP77 USP70
Chemical Abstracts Keyword: Plasmodium
falciparum
AU: C07K 15/12, 13/00
C07G 7/00
A61K 39/015

(74) Agent and/or Address for Service
Frank B. Dehn & Co
Imperial House, 15-19 Kingsway, London, WC2B 6UZ

(54) Small molecular weight antigen of Plasmodium falciparum

(57) A small molecular weight antigen of the asexual blood stages of *Plasmodium falciparum* which is characterized by:
(i) having an apparent molecular weight in the range of approximately 15 kD to 19 kD; (ii) not showing significant glycosylation by galactose or glucosamine labelling, but being acylated by myristic acid; (iii) being associated with the parasitophorous vacuole membrane and with inclusions and vesicles residing within the cytoplasm of the erythrocyte host cell; and (iv) being recognised by monoclonal antibodies against the asexual blood stages of *P. falciparum* which inhibit parasite growth *in vitro*; or an antigenic fragment thereof. A monoclonal antibody specific for this antigen, and a hybrid cell line which produces this antibody is also disclosed.

GB 2 200 642 A